### **ENVIRONMENTAL CHEMISTS**

Date of Report: January 10, 1996 Date Received: January 4, 1996

Project: Metro Self Monitor, PO #M51832 Date Samples Extracted: January 4, 1996 Date Extracts Analyzed: January 5, 1996

# RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC BY ICP (6010) Samples Processed Using Method 3005

Results Reported as mg/L (ppm)

Sample ID	Chromium	<u>Copper</u> <u>Nic</u>	<u>kel</u> <u>Zinc</u>
M51832	0.96	1.0	.4 0.09
Method Blank	<0.05	<0.05 <0	.05 <0.05

## **ENVIRONMENTAL CHEMISTS**

Date of Report: January 10, 1996 Date Received: January 4, 1996

Project: Metro Self Monitor, PO #M51832

## QUALITY ASSURANCE RESULTS FOR CHROMIUM, COPPER, NICKEL, AND ZINC Samples Processed Using Method 3005

Laboratory Code: 65580 (Duplicate)

	Reporting	Sample	Duplicate		Acceptance
Analyte:	Units	Result	Result	Difference	Criteria
				T. 1948. 1841	
Chromium	mg/L (ppm)	0.96	0.95	1.0	0-20
Copper	mg/L (ppm)	1.0	0.96	4	0-20
Nickel	mg/L (ppm)	1.4	1.4	0	0-20
Zinc	mg/L (ppm)	0.09	0.09	0	0-20

Laboratory Code: 65580 (Matrix Spike)

							Relative
	Reporting	Spike	Sample	% I	Recovery	Acceptance	Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	Difference
		THEOLOGY					
Chromium	mg/L (ppm)	5	0.96	88	92	80-120	4
Copper	mg/L (ppm)	5	1.0	88	87	80-120	1
Nickel	mg/L (ppm)	10	1.4	86	95	80-120	10
Zinc	mg/L (ppm)	5	0.09	91	101	80-120	10

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	Acceptance Criteria
	And the said			
Chromium	mg/L (ppm)	5	105	80-120
Copper	mg/L (ppm)	5	97	80-120
Nickel	mg/L (ppm)	10	107	80-120
Zinc	mg/L (ppm)	5	113	80-120

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

FORMS/COC

# SAMPLE CHAIN OF CUSTODY

KNJ 17I 01.04.96 1:45

Send Report To:		/ 1	1.				AND DESCRIPTIONS
Company HINSK	to lopp	en Wo	RK	Conta	CI GERA	cD /60m	0500
Address 628 Hawa City, State, Zip Sent L	one 8T	9813	7				
Phone # (206) 382	8779		Z	Date_	1-4-55	-	
SITE NO.	48 T	PROJE	ECT NAME		ļ.	PURCHASE ORDE	R#
7238	1	netro S	seld n	widoe	m	51832	
SAMPLEAS (signature)					I	ROJECT LOCAT	ION
19.6	2			•	3200	Goth A	re 5.
REMARKS						DISPOSAL INFO	
For Problem CALL	After 4.	00pm 66	1-5668	Sorry T.	R	ispose after 30 da eturn Samples	
	Date/Time	Type of	# of	Lab	C:	all for Instruction Analyse	
Sample #	Sampled	Sample	Jars	Sample	#	Requeste	
M 51832	14/56 11:50	1-120	/	6558	0 00	cu a.	2~
	7 1						
						<del></del>	
		·					
ļ						· .	
		·					
				<del>-,, ., ., ., ., ., ., ., ., ., ., ., .</del>			
SIGNATURE	PR	INT NAME	ll	COMPAN	<u>Ι</u>	Date	Time
Reinquished by	OEAA		ان	A.C.		1/4/96	1:37pg
Received by	100 B	<i>V</i>				//	1:37FM
Relinquished by:	Kurt	· Jemasa	<u> </u>	FBD + I	<del></del>	1/4/96	+
Received by:							
· · · · · · · · · · · · · · · · · · ·						<u> </u>	

### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

January 10, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on January 4, 1996 from your Metro Self Monitor, PO #M51832 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

keh

**Enclosures** 

FAX: 382-7335 ACU0110R.DOC

### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

January 10, 1996

## INVOICE # 96ACU0110-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M51832: Results of testing requested by Gerry Thompson, Project Manager for material submitted on January 4, 1996.

1 process water sample analyzed for Chromium,
Copper, Nickel, and Zinc @ \$65 per sample \$65.00

Amount Due \$65.00